

CLAIMS

What Is Claimed Is:

- 5 1. A stent comprising a radially expandable tubular body and a coating, the coating including a permeabilizing reagent for increasing the permeability of membrane junctions or cell membranes.
2. The stent of Claim 1, wherein the permeabilizing reagent is selected from the group consisting of a calcium ion chelator, a surfactant, and a receptor-mediated
- 10 permeabilizing reagent.
3. The stent of Claim 1, wherein the permeabilizing reagent is selected from the group consisting of iminodiacetic acid, nitriloacetic acid, ethylenediaminomonoacetic acid, ethylenediaminodiacetic acid, ethylenediaminetetraacetic acid, sodium taurodihydrofusidate, sodium salicylate, sodium caprate, sodium glycocholate, cholylsarcosine, isopropyl myristate,
- 15 partially hydrolyzed triglycerides, fatty-acid sugar derivatives, oleic acid derivatives, histamine, bradykinin and its conformational analogs, tumor necrosis factor alpha, nitroglycerine, sodium nitroprusside, diethylamine sodium, 3-morpholinosydnonimine, S-nitroso-N-acetyl-penicillamine, and vascular endothelial growth factor and combinations thereof.
- 20 4. The stent of Claim 1, wherein the coating additionally includes a P-glycoprotein system blocker.
5. The stent of Claim 4, wherein the P-glycoprotein system blocker is selected from the group consisting of Pluronic P-85®, verapamil, disulfiram and antisense oligonucleotide complementary to a messenger RNA encoding P-glycoprotein and
- 25 combinations thereof.
6. The stent of Claim 1, wherein the coating additionally includes a drug.

7. The stent of Claim 6, wherein the drug is selected from the group consisting of antineoplastic, antimetabolic, antiinflammatory, antiplatelet, antiallergic, anticoagulant, antifibrin, antithrombin, antiproliferative, antioxidant, antimigratory, antiextracellular matrix deposition, pro-apoptotic, nitric oxide donor, pro-angiogenic, and pro-arteriogenic substances and combinations thereof.

8. The stent of Claim 1, wherein the coating additionally includes a polymer.

9. A method of forming a coating for a stent, comprising applying a composition including a permeabilizing reagent and a fluid, and essentially removing the fluid from the composition on the stent to form the coating.

10. The method of Claim 9, wherein the composition additionally includes a polymer.

11. The method of Claim 9, wherein the composition additionally includes a drug.

12. A method of delivering a drug through a membrane junction or a cell membrane comprising:

delivering a permeabilizing reagent to a membrane junction or a cell membrane in a concentration sufficient to increase the permeability of the membrane junction or cell membrane; and

delivering a drug to the membrane junction or cell membrane, whereby the drug travels through the membrane junction or cell membrane.

13. The method of Claim 12, wherein the permeabilizing reagent is delivered by a stent and/or a catheter.

14. The method of Claim 12, wherein the drug is delivered by a stent and/or a catheter.

15. The method of Claim 12, wherein the permeabilizing reagent is a solution including a solute selected from the group consisting of glucose, mannose, maltose, dextrose, fructose, sodium chloride, sodium citrate, sodium phosphate, polyethylene glycol, polyvinyl pyrrolidone and amino acids.

5 16. The method of Claim 12, wherein the permeabilizing reagent is selected from the group consisting of iminodiacetic acid, nitriloacetic acid, ethylenediaminomonooacetic acid, ethylenediaminodiacetic acid, ethylenediaminotetraacetic acid, sodium taurodihydrofusidate, sodium salicylate, sodium caprate, sodium glycocholate, cholylsarcosine, isopropyl myristate, partially hydrolyzed triglycerides, fatty-acid sugar
10 derivatives, oleic acid derivatives, histamine, bradykinin and its conformational analogs, tumor necrosis factor alpha, nitroglycerine, sodium nitroprusside, diethylamine sodium, 3-morpholinosydnonimine, S-nitroso-N-acetyl-penicillamine, and vascular endothelial growth factor and combinations thereof.

17. A composition for treating restenosis, comprising a permeabilizing reagent
15 and a drug, wherein the permeabilizing reagent increases the permeability of membrane junctions or cell membranes of cells for the delivery of a drug to vascular tissues.

18. A method of inhibiting restenosis, comprising:

applying a permeabilizing reagent to endothelial cells; and

applying a drug to the area where the permeabilizing reagent is applied.

20 19. A method of local drug delivery, comprising:

locally applying a permeabilizing reagent to a selected area of a body tissue, and

locally applying a drug to the body tissue.

20. The method of Claim 19, wherein the permeabilizing reagent is applied before or concomitantly with the drug.

21. The method of Claim 19, wherein the local application of the permeabilizing reagent and the drug is via a stent.

5